

NRC INSPECTION MANUAL

PART 9900: 10 CFR GUIDANCE

50B_A.CFR

10 CFR 50, APPENDIX B APPLICABILITY OF APPENDIX B TO CHEMICALS AND REAGENTS

A. PURPOSE

The purpose of this guidance is to identify specific criteria which should be used by Inspection and Enforcement personnel for the review and evaluation of licensee management control systems for chemicals and reagents used in primary and secondary system water chemistry control and analysis.

B. DISCUSSION

10 CFR 50.34.b.(6) requires licensees to describe in the Final Safety Analysis Report (FSAR) information relating to the managerial and administrative controls to be used to assure safe operation.

In complying with these requirements as they relate to administrative controls for chemicals and reagents, most licensees document in the FSAR a commitment to the requirements of ANSI N18.7. Section 5.3.7 of 18.7-1972 and Section 5.3.8 of 18.7-1976 provide general guidance concerning chemical and radiochemical control activities.

Experience has shown that chemicals and reagents used in primary and secondary system water chemistry control and analysis have not consistently been subjected to controls commensurate with their importance to safety. Therefore, the offices of Nuclear Reactor Regulation, Inspection and Enforcement, and Standards Development, adopted the following NRC position regarding controls for chemicals and reagents.

The criteria of 10 CFR 50, Appendix B, delineate the need for appropriate control of certain materials. These materials include chemicals and reagents used in primary and secondary system water chemistry control and analysis. Paragraphs H and J of Appendix A to Safety Guide 33, dated November 3, 1972, and paragraphs 8 and 10 of Appendix A to Regulatory Guide 1.33, Revision 1, dated January 1977, amplify the need to establish such controls.

These controls may be in the form of administrative procedures which include provisions for storage and use of laboratory and bulk chemicals used in primary and secondary water chemistry control and

analysis. Examples of the type of controls deemed appropriate include:

1. Testing of purchased and lab-prepared chemicals and reagents prior to initial use to ensure that physical and chemical properties are consistent with purchase specifications or other technical requirements.
2. Labeling and dating to assure proper shelf life control plus any special environmental considerations that must be maintained during storage.

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